

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-22. (Canceled)

23. (New) A method of detecting interactions between species on a solid support and species in a liquid, comprising providing a solid support having at least two non-overlapping defined portions, wherein a first species is attached on at least one of said defined portions and at least one other defined portion is an area of the solid support where no interaction takes place, said other portion defining a reference area,

wherein the detection of interactions comprises for each defined portion:

exposing the defined portion to a liquid containing a second species, so as to cover the defined portion of the solid support;

temporarily reducing the amount of said liquid being in contact with the defined portion holding said first species, said reduction being carried out so that a reduced volume of said liquid remains in contact with said defined portion;

performing a measurement of the defined portion covered with the temporarily reduced amount of liquid, said measurement being capable of detecting an interaction between said first and said second species;

increasing the amount of liquid in contact with the defined portion so as to again expose the defined portion to said liquid containing a second species; and

repeating the exposing to a liquid, reducing the amount of liquid, performing a measurement and increasing the amount of liquid;

wherein the liquid in contact with the solid support is stirred; and

wherein the non-overlapping defined portions are in contact with the liquid containing the second species while said exposing to a liquid, reducing the amount of liquid, performing a measurement and increasing the amount of liquid are conducted.

24. (New) The method as claimed in claim 23, wherein the interactions on all defined areas are detected within 1 minute, and the detection of all interactions is time-resolved and repeated at least 15 times without interruption during at least 15 minutes in order determine the progress of the interaction over time.

25. (New) The method as claimed in claim 23, wherein said temporary reduction of liquid comprises a reduction of the amount of liquid near at least one of said defined areas without changing the total amount of liquid in contact with said solid support.

26. (New) The method as claimed in claim 23, wherein a difference between target and reference measurements is calculated.

27. (New) The method as claimed in claim 23, wherein the exposing, reducing the amount of liquid, and measuring is repeated, and wherein the concentration of said second species is increased by a finite amount before exposing, reducing the amount of liquid, and measuring are repeated.

28. (New) The method as claimed in claim 23, wherein the solid support is an essentially flat dish capable of holding a liquid confined within its boundaries.

29. (New) The method as claimed in claim 23, wherein the reduction of the amount of liquid is achieved by orienting the support at an angle that deviates from the horizontal to provide an elevated part and a lower part of said support, such that the elevated part will be covered by less liquid than the

lower part, and wherein the support is rotated at a predetermined speed of rotation.

30. (New) A device for detecting interactions between a first species attached to a support and a second species present in a liquid, when said support and said liquid containing said second species are brought into contact, comprising:

a solid support on which said first species can be attached in one or more non-overlapping defined areas;

a detector capable of detecting an interaction between said first species attached to the solid support and said second species contained in said liquid;

a mechanism adapted for stirring of the liquid in contact with the solid support and for temporarily reducing, in a defined area of said support, and in the course of a detection, the amount of liquid containing said second species with which said support is brought into contact, followed by increasing the amount of liquid being in contact with said defined area after said detection; wherein:

at least one of the defined areas does not have said first species attached, so as to form a reference area for the detection; and

said solid support is arranged such that it will not come in contact with any liquids other than said liquid containing said second species during the course of said detection.

31. (New) Device as claimed in claim 30, wherein said solid support is an essentially flat circular dish capable of holding a liquid confined within its boundaries and wherein the mechanism adapted for stirring of the liquid in contact with the solid support and for temporarily reducing, in a defined area of said support, and in the course of a detection, the amount of liquid containing said second species with which said support is brought into contact comprises a rotating holder for said flat circular dish,

said holder being oriented so that the support is maintained at an angle that deviates from the horizontal to provide an elevated part and a lower part of said support, such that the elevated part will be covered by less liquid than the lower part, and

the device being provided with a motor to rotate the support at a predetermined speed of rotation.

32. (New) The device as claimed in claim 30, wherein the detector is a scintillation detector, and wherein there is further provided an electronic counter device for counting the impulses from the detector, a control unit for adjusting and reporting the angular position of the support, and a computer for synchronizing scintillation counter output from the counter and the angular position of the support from the control unit.